

KUBOTA Corporation

EXECUTIVE ORDER U-R-025-0367 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)				
2009	9KBXL.778KCB	0.778	Diesel	3000				
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION					
	Indirect Diesel Inje	ection	Generator Set, Other Industrial Equipment					

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED	EMISSION			E	XHAUST (g/kw-l		OPACITY (%)			
POWER CLASS	STANDARD CATEGORY		НС	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK ·
8 <u><</u> kW < 19	Tier 4	STD	N/A	N/A	7.5	6.6	0.40	20	15	50
		CERT			5.8	2.5	0.29	6	4	13

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 24th day of December 2008.

Annette Hebert, Chief

Mobile Source Operations Division

Rophal Surrowity

Engine Model Summary Form

Manufacturer: KUBOTA Corporation

Engine category: Nonroad CI

EPA Engine Family: 9KBXL,778KCB

Mfr Family Name: N/A

Process Code: New Submission

Attachment

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U-R-025-0367

8.Fuel Rate: 9.Emission Control (lbs/h)@peak torque Device Per SAE J1930	ပ	\Box					3.3				5.4		1 12		1	
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/.Fuel Rate: mm/stroke@peak torque	18%															
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6.Torque @ RPM (SEA Gross)	34.2@1800	36.7@2400	34.4@2400	34.5@2000	33.3@1600	33.3@1800										- 15
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5. Fuel Kate: (lbs/hr) @ peak HP (for diesels only)	6.8	8.3	7.3	7.1	5.2	5.6					2000 1000 1000					
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